

US Army Corps of Engineers

PUBLIC NOTICE

NUMBER: 22514N DATE: April 23, 1998 RESPONSE REQUIRED BY: May 23, 1998

Regulatory Branch 333 Market Street San Francisco, CA 94105-2197

PERMIT MANAGER: Angie Wulfow PHONE: 415-977-8452 Email: awulfow@smtp.spd.usace.army.mil

- 1. Introduction: New Cities Development Group, 9781 Blue Larkspur Lane, Monterey, California, 93940 (contact: Tom Merschel, telephone: (408) 655-5000), has submitted an application for a Department of the Army permit to fill 0.4 acre of wetlands and other waters of the United States (0.24 acre wetlands and 0.16 acre waters) association with construction of the Thomas Ranch residential subdivision. proposed project is located on the western side of San Ramon, west of Interstate 680. near the intersection of Crow Canyon and Bollinger Canyon Roads (See Sheet 1). This permit application is being processed pursuant to the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344).
- 2. Project Description: The project is a residential subdivision that includes 140 single-family homes proposed on 33 gross acres of the 117-acre site with 84 acres proposed to remain as open space that will be dedicated to the East Bay Regional Park District. A regional trail will be constructed as planned by the EBRPD to eventually connect the Las Trampas Regional Park, the Bishop Ranch Open Space property south of Norris Canyon Road, and the Pleasanton Ridge Regional Park. A majority of the proposed residential lots would be clustered in the flatter, northeastern portion of the site. The only access to the project site for the new subdivision is from the extension of the existing public street, Cobblestone Drive.

In addition to the proposed subdivision, the annexation of Crow Canyon Road right-of-way from the Bollinger Canyon Road intersection to the Alameda County line is also part of the proposed project.

To construct the project, approximately 1.3 million cubic yards of soil will require excavation. Over-excavation and slide repair will amount to approximately 530,000 cubic yards, and other project grading will amount to approximately 845,000 cubic yards. The excavated material will be used as fill to construct a series of elevated benches in the lower portion of the site to support the homes. The greatest amount of fill will occur at the lowest elevation of the site, at the northeast corner near the Crow Canyon/Bollinger Cany on roads intersection, where approximately 35 to 50 feet of fill will be placed.

3. State Approvals: The USACE and California Department of Fish and Game (CDFG) have jurisdiction over waters within the project area, and the Regional Water Quality Control Board (RWQCB) is responsible for issuing a Section 401 Water Quality Certification or a waiver for discharge of fill into waters of the U.S. requiring USACE authorization. Zander Associates has performed a preliminary delineation of jurisdictional waters of the United States. The delineation was confirmed by the Corps on March 19, 1998.

An application package has been submitted to the San Francisco Regional Water Quality Control Board (RWQCB) for issuance of a water quality certification or waiver, and a package has been submitted to the California Department of Fish and Game in support of the application for a Streambed Alteration Agreement. No Corps permit will be granted until the applicant obtains the required certification or waiver from the RWOCB. A waiver shall be explicit, or it will be deemed to have occurred if the State fails or refuses to act on a valid request for certification within 60 days after the receipt of a valid request, unless the District Engineer determines a shorter or longer period is reasonable for the State to act.

Those parties concerned with any water quality issues that may be associated with this project should write to the Executive Officer, California Regional Water Quality Control Board, San Francisco Bay Region, 2101 Webster Street, Suite 500, Oakland, CA 94612, by the close of the comment period of this public notice.

The project is outside the jurisdictional boundaries of the San Francisco Bay Conservation and Development Commission and the California Coastal Commission.

4. **Environmental Preliminary** Assessment: The Corps of Engineers has assessed the environmental impacts of the action proposed in accordance with the requirements of the National Environmental Policy Act of 1969 (Public Law 91-190), and pursuant to Council on Environmental Quality's Regulations, 40 CFR 1500-1508, and USACE's Regulations, 33 CFR 230 and 325, Appendix B. In addition to the preliminary Environmental Assessment, a Final Environmental Impact Report (FEIR) for the Thomas Ranch project was certified by the City of San Ramon in fulfillment of CEQA guidelines (Section 15163) on January 13, 1998. Unless otherwise stated, the preliminary Environmental Assessment describes the direct, indirect, and cumulative impacts which result from regulated activities within the jurisdiction of the Corps of Engineers.

The preliminary Environmental Assessment resulted in the following findings:

a. IMPACTS ON THE AQUATIC ECOSYSTEM

(1) <u>Physical/Chemical Characteristics and</u> Anticipated <u>Changes</u>

Substrate - The proposed project willpermanently alter portions of the existing substrate which consists of nearly level areas in the northeastern portion of the property that transition to moderately steep hillsides toward the southwest. The site supports primarily non-native annual vegetation. Construction of the project will result in the alteration of much of the site topography through cut and fill activities. The material used to fill 0.4 acre of jurisdictional wetlands and other waters of the United States will be native on-site soils. Final build-out of the project will result in permanent alteration of the substrate from primarily grassland to residential housing. Approximately 84 acres of the southwestern hillsides on the project site will be retained as open space.

<u>Drainage Patterns</u> - The rolling hills within the project area contain four unnamed intermittent drainages (A through D on Sheet 2). These drainages generally direct seasonal runoff toward a culvert at the eastern project boundary. Drainage patterns on the proposed project site would be

slightly altered by construction of the project. Grading for landslide repair and extension of the access road will require filling and culverting of approximately 600 linear feet of Drainage A and approximately 1,050 linear feet of Drainage B. Flows that would have been carried in Drainage B will be intercepted by a series of concrete V-ditches constructed above the landslide repair area and directed into the storm drain system. Flows will not be altered in Drainage C, Drainage D or in the reaches of Drainage A above the proposed culvert. No detention facilities will be required on site.

Water Quality/Hydrology - The water quality of all the drainages on site has been impacted by many years of livestock grazing. Under the proposed development plan the project could have both long-term and short-term adverse impacts on water quality. Construction activities and postconstruction site uses could result in degradation of water quality in nearby surface water bodies by reducing the quality of storm water runoff. A Storm Water Pollution Prevention Plan (SWPPP) will be prepared that mitigates potential impacts to surface water quality from all phases of the project. The SWPPP will be submitted to the City of San Ramon prior to site grading for review and approval. The SWPPP will include erosion and sediment controls, construction storm water management controls and post-construction storm water management controls.

Flood Control - An increase in impervious surfaces would increase the amount of runoff generated at the project site, potentially causing localized flooding and ultimate erosion of creek banks. The final drainage plan for the project will be prepared by a licensed professional engineer and will include evaluation of the capacity

of the conveyance structures between the project site and San Ramon Creek. All storm drainage plans will be reviewed by the City of San Ramon Engineering Department for conformity with their standard storm drainage requirements. Any improvements deemed necessary by the City, will be part of the conditions of approval. Any required upgrades must be completed prior to the first rainy season after initiation of project construction.

Erosion/Sedimentation Rate - Development of the project will modify the existing ground surface and vegetation and could result short-term erosion sedimentation during construction of the project. Soils exposed during grading and construction could contribute to increased sediment loads if adequate erosion control measures were not implemented. These potential impacts will be reduced by implementing erosion control measures. Specific measures will be outlined in the SWPPP prepared for the project.

(2) Biological Characteristics and Anticipated Changes

Wetlands (Special Aquatic Site) - There is approximately 0.66 acre of waters of the United States existing within the project area. This total is comprised of 0.27 acre of wetlands and 0.39 acre of other waters of the United States.

The wetlands consist of two types; inchannel and a seasonal wetland swale. The in-channel wetlands occur in the upper reaches of Drainage B and in the lower reach of Drainage D. In Drainage B, the inchannel wetland occurs at the base of a landslide area and is dominated by rush (Juncus xiphioides and J. effusus). In Drainage D, the in-channel wetland occurs

in the lower reach of the drainage that is relatively flat with no observable scour. The vegetation in this area is dominated by Lolium multiflorum. The seasonal wetland swale occurs at the base of two hillsides just east of Drainage A. This area occurs as a result of hillside seepage and appears to have been established relatively recently. The vegetation in the swale consists primarily of Lolium multiflorum in the upper reaches and the lower reaches contain concentrated areas of Juncus xiphioides.

The waters of the United States, other than wetlands, occurring within the project area include the four intermittent drainages identified on Sheet 2. These drainages are characterized by the presence of a defined channel, bed and bank with an observable ordinary high water line. These channels are largely non-vegetated, but some support adjacent riparian woodland vegetation. The channels vary in average width from two feet to ten feet.

The proposed project would result in the removal of approximately 0.4 acre of waters of the United States; 0.24 acre of wetlands and 0.16 acre of other waters. A summary of these impacts is provided in Table 1, see page 9.

The applicant proposes to compensate for these losses by creating an additional 0.85 acre of seasonal wetland and riparian habitat, and by enhancing riparian habitat along 1,300 linear feet within the unaltered portions of Drainage A and Drainage D. A seasonal wetland will be created in the area between Drainage A and the lower portion of Drainage C. This area will be approximately 0.36 acre in extent and will be created through minor grading to flatten the area and facilitate surface ponding and soil saturation. The area will be planted

with a variety of herbaceous wetland plant The 3:1 slope adjacent to the species. wetland area will consist of approximately 0.23 acre and will be planted with riparian species. A second seasonal wetland (0.26 acre) will be created adjacent to Drainage A just upstream of the confluence with Drainage D. This wetland area will also be created through minor grading of the existing slopes and will be planted with typical herbaceous wetland plants. portion of the created wetland near Drainage D will be planted with willow and wild rose. Riparian enhancement plantings will occur along 1,300 linear feet of Drainage A and Drainage D in areas that are currently devoid of riparian canopy.

The applicant has prepared and submitted a mitigation plan that will be circulated to the appropriate federal and state resource and regulatory agencies for review.

Endangered Species - At the request of the applicant, the USFWS provided technical assistance in determining if the project site provided suitable habitat for the federally threatened California red-legged frog (Rana aurora draytonii). The USFWS surveyed the property on November 5, 1996 and determined that protocol surveys would not be necessary because the area of the drainage affected by the project contained marginal habitat for the red-legged frog. Instead, pre-construction surveys were recommended to ensure that if any redlegged frogs were found, they would be relocated into the same drainage upstream of the construction area.

Habitat for Fish, Other Aquatic Organisms and Wildlife - The drainages and seasonal wetland swale provide seasonal habitat for several aquatic insects, the Pacific tree frog, and California newt. The riparian woodland

vegetation provides habitat for birds, and small mammals, including song sparrow, Wilson's warbler, black-tailed deer, striped skunk and raccoon.

b. IMPACTS ON RESOURCES OUTSIDE THE AQUATIC ECOSYSTEM

(1) <u>Physical Characteristics and Anticipated</u> Changes

Air Quality - Construction activity is likely to result in short term increases of dust emissions, and exhaust emissions from construction equipment. Dust emissions will be mitigated in the following ways: 1) all active construction areas will be watered at least twice daily, 2) all trucks hauling loose materials will be covered with tarpaulins or other effective covers, 3) all unpaved access roads, parking areas, and staging areas will be paved, or water or nontoxic soil stabilizers will be applied to all unpaved access roads, 4) paved access roads, parking areas, and staging areas will be swept daily with a water sweeper and streets will be swept daily with a water sweeper in areas where visible soil material is carried onto adjacent public streets, 5) inactive construction areas, including previously graded areas inactive for at least ten days, will be hydroseeded or applied with a nontoxic soil stabilizer, 6) exposed stockpiles will be enclosed, covered, and watered twice daily (or applied with a non-toxic soil binder), 7) speed limits on unpaved roads will be 15 mph, 8) sandbags or other erosion control measures will be implemented to prevent silt runoff, 9) disturbed areas will be replanted with vegetation as soon as possible, 10) wheel washers will be installed and used to clean all trucks and equipment leaving the construction site, 11) wind breaks or tree wind breaks will be installed on windward sides of construction areas, 12) excavation and grading activities will be terminated when winds exceed 25 mph, and 13) the area subject to excavation, grading and other activities will be limited at any one time.

Emissions from construction equipment will be mitigated as follows: 1) idling time of all construction equipment will not exceed five minutes, 2) all equipment will be properly tuned and maintained in accordance with the manufacturer's specifications, 3) when feasible, alternative fueled or electrical construction equipment will be used, 4) the minimum practical engine size will be used, 5) gasoline-powered equipment will be equipped with catalytic converters where feasible, and 6) the hours of operation of heavy duty equipment will be limited and/or the amount of heavy duty equipment will be limited.

By basing its evaluation of air quality impacts only on areas within Corps jurisdiction, the Corps has determined that the total direct and non-direct project emissions would not exceed the deminimis threshold levels of 40 CFR 93.153. therefore, the proposed project would conform to the State Air Quality Implementation Plan (SIP) for California

Noise Conditions - Construction activity would have minor, short term impacts on the ambient noise levels in the project area.

Geologic Conditions - No known active faults cross the project site, and therefore impacts associated with fault rupture are unlikely. However, the project site is expected to be subject to intense ground shaking resulting from large earthquakes on active fault zones in the region. The potential for earthquake ground shaking is common to the San Francisco Bay region

vegetation provides habitat for birds, and small mammals, including song sparrow, Wilson's warbler, black-tailed deer, striped skunk and raccoon.

b. IMPACTS ON RESOURCES OUTSIDE THE AQUATIC ECOSYSTEM

(1) <u>Physical Characteristics and Anticipated</u> Changes

Air Quality - Construction activity is likely to result in short term increases of dust emissions, and exhaust emissions from construction equipment. Dust emissions will be mitigated in the following ways: 1) all active construction areas will be watered at least twice daily, 2) all trucks hauling loose materials will be covered with tarpaulins or other effective covers, 3) all unpaved access roads, parking areas, and staging areas will be paved, or water or nontoxic soil stabilizers will be applied to all unpaved access roads, 4) paved access roads, parking areas, and staging areas will be swept daily with a water sweeper and streets will be swept daily with a water sweeper in areas where visible soil material is carried onto adjacent public streets, 5) inactive construction areas, including previously graded areas inactive for at least ten days, will be hydroseeded or applied with a nontoxic soil stabilizer, 6) exposed stockpiles will be enclosed, covered, and watered twice daily (or applied with a non-toxic soil binder), 7) speed limits on unpaved roads will be 15 mph, 8) sandbags or other erosion control measures will be implemented to prevent silt runoff, 9) disturbed areas will be replanted with vegetation as soon as possible, 10) wheel washers will be installed and used to clean all trucks and equipment leaving the construction site, 11) wind breaks or tree wind breaks will be installed on windward sides of construction areas, 12) excavation and grading activities will be terminated when winds exceed 25 mph, and 13) the area subject to excavation, grading and other activities will be limited at any one time.

Emissions from construction equipment will be mitigated as follows: 1) idling time of all construction equipment will not exceed five minutes, 2) all equipment will be properly tuned and maintained in accordance with the manufacturer's specifications, 3) when feasible, alternative fueled or electrical construction equipment will be used, 4) the minimum practical engine size will be used, 5) gasoline-powered equipment will be equipped with catalytic converters where feasible, and 6) the hours of operation of heavy duty equipment will be limited and/or the amount of heavy duty equipment will be limited.

By basing its evaluation of air quality impacts only on areas within Corps jurisdiction, the Corps has determined that the total direct and non-direct project emissions would not exceed the deminimis threshold levels of 40 CFR 93.153. therefore, the proposed project would conform to the State Air Quality Implementation Plan (SIP) for California

Noise Conditions - Construction activity would have minor, short term impacts on the ambient noise levels in the project area.

Geologic Conditions - No known active faults cross the project site, and therefore impacts associated with fault rupture are unlikely. However, the project site is expected to be subject to intense ground shaking resulting from large earthquakes on active fault zones in the region. The potential for earthquake ground shaking is common to the San Francisco Bay region

and is unavoidable; it will occur whether or not the project site is developed.

Numerous landslides have occurred on the slopes of the project site creating debris deposits. In order for any development to occur on the site, many of these landslides will need to be repaired and/or stabilized. Because of the extent of geotechnical repairs that need to be undertaken on the site, a Geologic Hazard Abatement District (GHAD) will be created. The GHAD will be formed to maintain the engineered slopes of the proposed subdivision.

(2) <u>Biological Characteristics and Anticipated Changes</u>

Other Terrestrial Habitat Grading associated with project implementation would require removal of existing vegetation and associated wildlife habitat in areas proposed for development. The project will result in the loss, degradation, or disturbance to more than 60 acres that is primarily grasslands or agricultural lands. A detailed Landscape and Vegetation Management Plan will be prepared by a qualified landscape architect in consultation with the applicant's biologist. The plan will 1) provide for re-establishment of grassland, riparian, and oak woodland cover on graded slopes in open space areas, 2) incorporate mitigation requirements to replace trees and enhance riparian habitat affected by the project (discussed in (a)(2) above), 3) identify unsuitable species which will not be used in landscaping, 4) prevent the establishment and spread of introduced broom. and specify long-term 5) management provisions ensure reto establishment of native and ornamental landscape improvements.

No listed threatened or endangered plants have been documented on the project site; therefore, impacts to listed plant species are not anticipated and no mitigation measures are required.

Development of the site may affect raptors nesting within the vicinity of proposed grading. The EIR for the project provides for preconstruction surveys and construction measures to reduce the potential for impacts on nesting raptors.

(3) <u>Socioeconomic Characteristics and</u> Anticipated Changes

Aesthetic Quality - Mass grading and construction of homes would alter the existing open landscape character and natural landform of the site, as seen from local roads. In order to maximize the effect of landscape screening and thus reduce visual contract, street trees will be installed at the earliest time feasible. Trees will be watered and maintained regularly during their establishment period. Contour grading techniques will be employed to the extent feasible in order to reduce visual contrast with existing landform. Hydroseeding mix will be blended to replicate seasonal colors of surrounding existing grasses and will be applied at the earliest time feasible in order to reduce visual contrast with surrounding landscape color.

Economics and Employment - The proposed project would result in economic benefits to the applicant, the applicant's vendors and contractors and to the City of San Ramon. The project will provide short term employment related to construction.

c. SUMMARY OF INDIRECT IMPACTS

None have been identified.

d. SUMMARY OF CUMULATIVE IMPACTS

The foothills west of I-680 in the vicinity of Dublin, San Ramon, Danville, and Alamo, are changing from ranchland to commericial /residential development. Cumulative impacts to most wetland habits are expected to be minor due to Corps requirements for mitigation. Where the wetland vegetation is diverse and multi-story the lag time between development of the mitigation site and loss of the habitat would result in moderate adverse cumulative impacts for several years. Where the wetland is degraded and lacks diversity the impacts can be mitigated within a few growing seasons. It is very likely that seasonal stream channels within the areas to be developed will be filled and no opportunity will exist to reestablish the This will have permanent longchannel. term cumulative adverse impacts seasonal stream channel type habitat.

e. CONCLUSIONS RECOMMENDATIONS

AND

Based on an analysis of the above identified impacts, a preliminary determination has been made that it will not be necessary to prepare an environmental Impact Statement (EIS) for the subject permit application. The Environmental Assessment for the proposed action has, however, not yet been finalized and this preliminary determination may be reconsidered if additional information is developed.

5. Alternatives Analysis: Evaluation of this activity's impacts includes application of the guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b) of the Clean Water Act (33 U.S.C. 1344(b)). An evaluation pursuant to the guidelines indicates that the project is not dependent on location in, or proximity to waters of the United States to achieve the basic project This conclusion raises the rebutable presumption that there is a practicable alternative to the project which would have less adverse impact to the aquatic ecosystem. The applicant has submitted an analysis of alternatives for the compliance to facilitate a determination with the guidelines.

The Alternatives Analysis for the project analyzed both alternative locations and alternative site configurations and concluded that there are no practicable alternatives to the proposed project. The only feasible offsite alternative within the applicant's market area is no longer available for purchase. In addition, no alternative site configurations are feasible since any amount or configuration of development on the project site will require the same amount of grading

as the proposed project due to the existing landslides on the property.

6. Public Interest Evaluation: The

decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of probable impacts which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of the general balancing process. That decision will reflect the national concern for both protection and utilization of important resources. All factors which may be relevant to the proposal must be considered including the cumulative effects Among those are conservation, thereof. aesthetics. general economics. environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and production, mineral considerations of property ownership, and, in general, the needs and welfare of the people.

7. Purpose and Use of Public Comments:

The Corps of Engineers is soliciting comments from the public, federal, state, local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of the

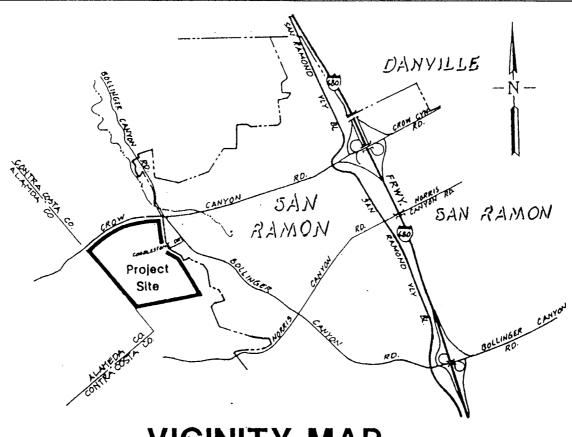
project. All comments received by the Corps will be considered in the decision

whether to issue, modify, condition, or deny a permit for the project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used to determine the overall public interest of the proposed activity.

8. Submission of Comments: Interested parties may submit in writing activity. comments concerning this Comments should include the applicant's name, the public notice number, and the date of this notice and should be forwarded so as to reach this office within the comment period specified on page one of this notice. Comments should be sent to Lieutenant Colonel Richard G. Thompson, District Engineer, Attention: Regulatory Branch. It is Corps policy to forward any such comments to the applicant for resolution or rebuttal. Any person may also request, in writing, within the comment period of this notice that a public hearing be held to consider this application. Requests for public hearings will state, with particularity, the reasons for holding a public hearing. Additional information may be obtained from the applicant whose address is indicated in the first paragraph of this notice or by contacting Ms. Angie Wulfow of our office at telephone (415) 977-8452 or Email:awulfow@smtp.spd.usace.army.mil. Details or any changes of a minor nature which are made in the final permit action will be provided on request.

Table 1. Summary of Waters Impacts

Water/wetland Type	Area Existing (acres)	Area Impacted (acres)	Area Preserved (acres)
Seasonal Wetland Swale	0.22	0.22	0
In-channel Wetland	0.05	0.02	0.03
Intermittent Channel			
Drainage A	0.18	0.06	0.12
Drainage B	0.10	0.10	0
Drainage C	0.05	0	0.05
Drainage D	0.06	0	0.06
Total	0.66	0.4	0.26



VICINITY MAP

No Scale

PURPOSE: RESIDENTIAL DEVELOPMENT

DATUM: NGVD

ADJACENT PROPERTY OWNERS: SEE PERMIT

APPLICATION

PLAN VIEW

TOM MERSCHEL
NEW CITIES DEVELOPMENT GROUP
9781 BLUE LARKSPUR LANE
MONTEREY, CALIFORNIA 93940

VICINITY MAP

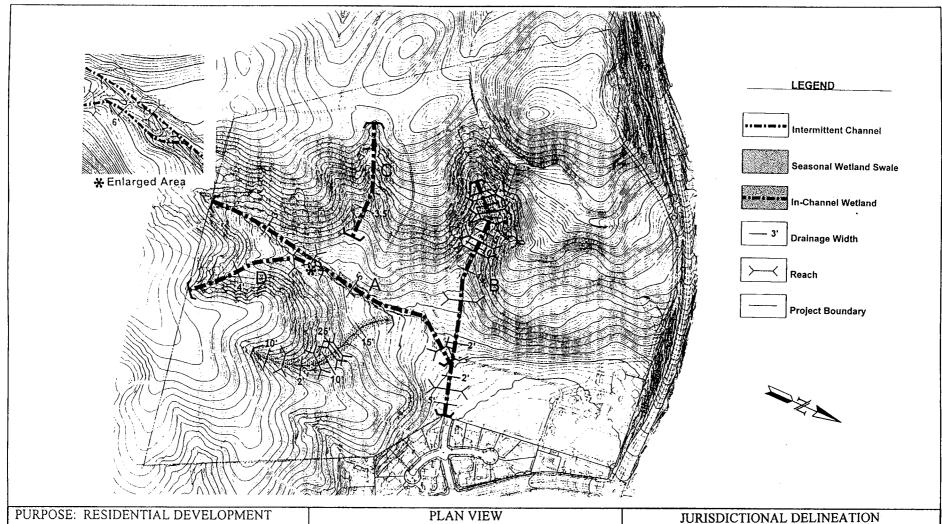
IN: UNNAMED DRAINAGES AT: THOMAS RANCH

COUNTY OF: CONTRA COSTA STATE: CA

APPLICATION BY: TOM MERSCHEL

SHEET 1 OF 7

DATE 9/30/97



DATUM: NGVD

ADJACENT PROPERTY OWNERS: SEE PERMIT **APPLICATION**

TOM MERSCHEL **NEW CITIES DEVELOPMENT GROUP** 9781 BLUE LARKSPUR LANE MONTEREY, CALIFORNIA 93940

based on 3/19/98 site visit with Corps (Angie Wulfow)

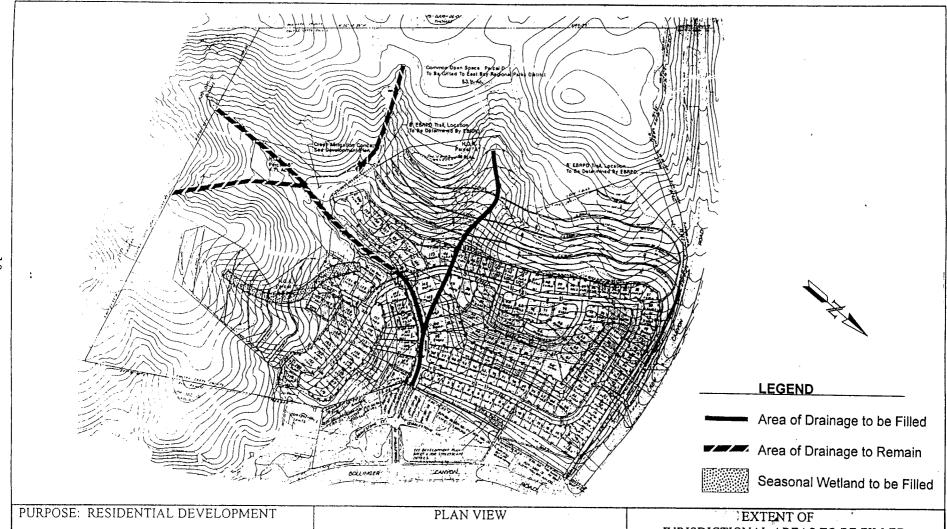
IN: UNNAMED DRAINAGES

AT: THOMAS RANCH

COUNTY OF: CONTRA COSTA STATE: CA

APPLICATION BY: TOM MERSCHEL

SHEET 2 OF 7 DATE 3/24/98



DATUM: NGVD

ADJACENT PROPERTY OWNERS: SEE PERMIT

APPLICATION

TOM MERSCHEL
NEW CITIES DEVELOPMENT GROUP
9781 BLUE LARKSPUR LANE
MONTEREY, CALIFORNIA 93940

JURISDICTIONAL AREAS TO BE FILLED

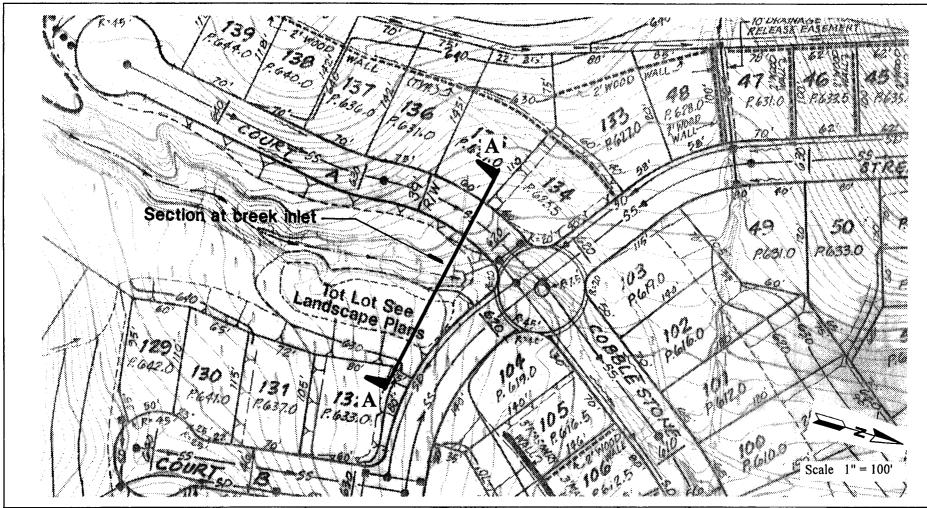
IN: UNNAMED DRAINAGES

AT: THOMAS RANCH

COUNTY OF: CONTRA COSTA

STATE: CA

APPLICATION BY: TOM MERSCHEL SHEET 3 OF 7 DATE 3/24/98



PURPOSE: RESIDENTIAL DEVELOPMENT

DATUM: NGVD

ADJACENT PROPERTY OWNERS: SEE PERMIT

APPLICATION

PLAN VIEW

TOM MERSCHEL
NEW CITIES DEVELOPMENT GROUP
9781 BLUE LARKSPUR LANE
MONTEREY, CALIFORNIA 93940

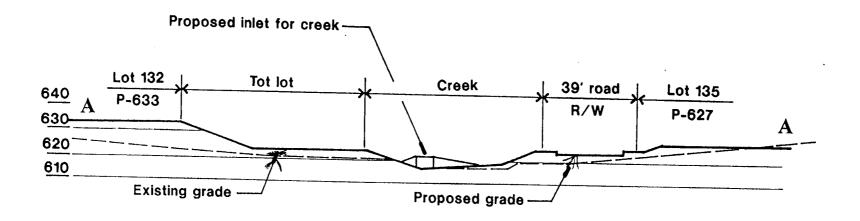
PLAN VIEW OF TRANSITION AREA
NATURAL CREEK TO CULVERT

IN: UNNAMED DRAINAGES

AT: THOMAS RANCH

COUNTY OF: CONTRA COSTA STATE: CA

APPLICATION BY: TOM MERSCHEL SHEET 4 OF 7 DATE 9/30/97



Scale $1'' = 40' \pm$

PURPOSE: RESIDENTIAL DEVELOPMENT

DATUM: NGVD

ADJACENT PROPERTY OWNERS: SEE PERMIT

APPLICATION

CROSS SECTION

TOM MERSCHEL NEW CITIES DEVELOPMENT GROUP 9781 BLUE LARKSPUR LANE MONTEREY, CALIFORNIA 93940

CROSS SECTION OF TRANSITION AREA NATURAL CREEK TO CULVERT

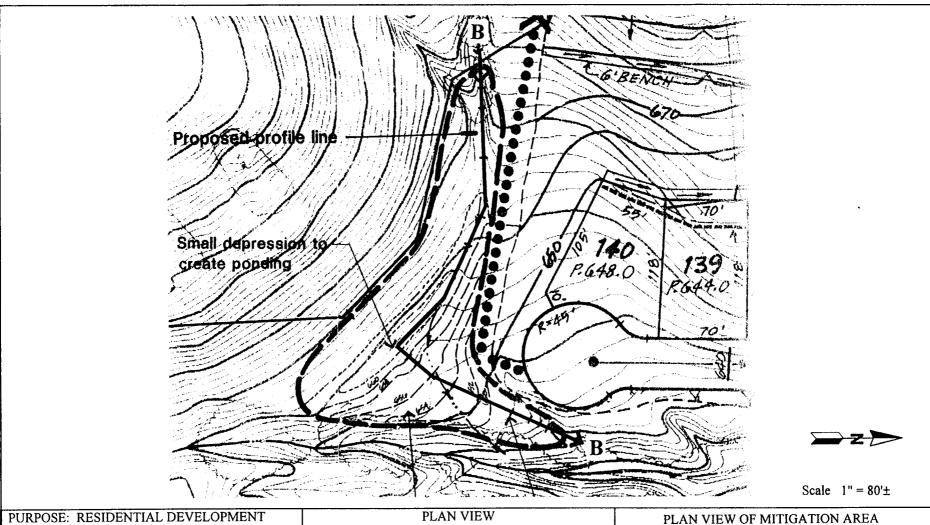
IN: UNNAMED DRAINAGES

AT: THOMAS RANCH

COUNTY OF: CONTRA COSTA

STATE: CA

APPLICATION BY: TOM MERSCHEL SHEET 5 OF 7 DATE 9/30/97



DATUM: NGVD

ADJACENT PROPERTY OWNERS: SEE PERMIT

APPLICATION

TOM MERSCHEL **NEW CITIES DEVELOPMENT GROUP** 9781 BLUE LARKSPUR LANE **MONTEREY, CALIFORNIA 93940**

IN: UNNAMED DRAINAGES AT: THOMAS RANCH

STATE: CA COUNTY OF: CONTRA COSTA

APPLICATION BY: TOM MERSCHEL DATE 9/30/97 SHEET 6 OF 7

